

seq_name: N_Geneseq_34:Q12746

seq_documentation_block:

ID Q12746 standard; DNA: 639 BP.
AC Q12746:
DT 27-SEP-1991 (first entry)
DE B.burgdorferi strain Pro PC gene.
KW Lyme borreliosis; vaccine; flagellin; ss.
OS Borrelia burgdorferi.
PN MO9109870-A.
PD 11-JUN-1991.
PF 21-DEC-1990; E02282.
PR 22-DEC-1989; DE-942728.
PR 13-JUN-1990; DE-018988.
PA (MKR-) MIKROGEN MOLEKULARB.
PI Fuchs R, Wilske B, Preacc-Murisc V, Motz M, Soutschek E:
DR WPI: 91-222844/30.
P-PSDB; R13140.
PT New Borrelia burgdorferi proteins - useful as immunoassay
PS reagents and antigens for vaccine prodn.
CC Example 3: Page 26; 68pp; German.
CC Protein PC was isolated from a B.burgdorferi cell lysate and
CC digested with trypsin. The amino acid sequence of two tryptic
CC fragments was determined. Probe pools corresponding to each
CC fragment were synthesised and used to screen a B.burgdorferi cDNA
CC library. A clone contg. the 639 nucleotides of the PC coding
CC sequence was identified and sequenced. The protein sequence
CC deduced from this coding sequence does not correspond to the amino
CC acid sequence printed in the specification (R13140). For the two
CC sequences to correspond, insert an A residue between G(84) and
CC C(85) and delete T(111).
CC See Q12744-Q12747, Q13297-8 and R13139-R13142.
SQ Sequence 639 BP; 252 A; 88 C; 116 G; 183 T;

alignment_scores:

Quality: 8.00 Length: 8
Ratio: 1.000 Gaps: 0
Percent Similarity: 100.000 Percent Identity: 100.000

alignment_block:

US-08-487-032A-764 x Q12746 ..

Align seg 1/1 to: Q12746 from: 1 to: 639

121 GYHISAlaAspleuGlyLysGln 128
|||||
427 GGTGATGAGATCTTGCAACACAG 450

seq_name: N_Geneseq_34:Q65405

seq_documentation_block:

ID Q65405 standard; cDNA: 1670 BP.
AC Q65405:
DT 30-NOV-1994 (first entry)
DE Cuphea hookeriana thioesterase cDNA clone CMT10.
KW Cuphea hookeriana; tree; ACP-thioesterase;
KM acyl carrier protein-thioesterase; enzyme; ds.
OS Cuphea hookeriana.
PN MO9410288-A.
PD 11-MAY-1994.
PF 29-OCT-1993; U10814.
PR 30-OCT-1992; US-968971.
PA (CALJ) CALGENE INC.
PI Davies HM, Knutson DS, Voelker TA:
DR WPI: 94-167447/20.
PT DNA constructs encoding medium- and long-chain acyl-ACP
PT thioesterases - useful commercially as detergents, lubricants,
PT and in sports and low calorie foods
PS Disclosure; Fig.9; 79pp; English.
CC This DNA encodes a Cuphea hookeriana thioesterase cDNA clone CMT10.

CC activity towards fatty acyl-ACPs.
SQ Sequence 1670 BP; 408 A; 375 C; 436 G; 451 T;

alignment_scores:

Quality: 8.00 Length: 8
Ratio: 1.000 Gaps: 0
Percent Similarity: 100.000 Percent Identity: 100.000

alignment_block:

US-08-487-032A-764 x Q65405/rev ..

Align seg 1/1 to reverse of: Q65405 from: 1 to: 1670

14 SerAlaValIleSerSerSerIleu 21
|||||
115 TCAGCAGCTGTGTCATCCAGCTTG 1092

seq_name: N_Geneseq_34:Q73869

seq_documentation_block:

ID Q73869 standard; DNA: 585 BP.
AC Q73869:
DT 25-MAY-1995 (first entry)
DE Borrelia jsb antigen vaccine.
KW OspC antigen; vaccine; Lyme disease; borreliosis; immunogen;
KM serovar typing; restriction fragment length polymorphism;
KM RFLP; Pichia pastoris; ss.
OS Borrelia burgdorferi jsb.
PN MO9425596-A.
PD 10-NOV-1994.
PF 29-APR-1994; E01365.
PR 29-APR-1993; US-053863.
PA (IMMO) IMMUNO AG.
PI Crowe B, Dörner F, Lányi I:
DR WPI: 94-358273/44.
P-PSDB; R60896.
PT Immunogenic composition comprising OspC antigens - for the
PT treatment of Lyme borreliosis in different, specific geographical
PT areas.
PS Disclosure; Fig. 8a; 115pp; English.
CC A vaccine for Lyme disease includes selected OspC antigen
CC formulations based on defined OspC families resolved by serovar
CC typing and RFLP typing. Partial sequences of OspC genes selected
CC from different RFLP types are given in Q73863-905 (encoded peptides,
CC comprising the first 92% of mature OspC, are given in R62771-93).
CC Complete sequences of these novel ospC genes, including the 3' end,
CC plus sequences for the ospC genes of Borrelia strains H13 and 28691
CC are given in Q73857-82, and encoded proteins in R60884-909. The
CC DNA sequences may be expressed in e.g. Pichia pastoris for
CC recombinant antigen production.
SQ Sequence 585 BP; 231 A; 85 C; 110 G; 159 T;

alignment_scores:

Quality: 8.00 Length: 8
Ratio: 1.000 Gaps: 0
Percent Similarity: 100.000 Percent Identity: 100.000

alignment_block:

US-08-487-032A-764 x Q73869 ..

Align seg 1/1 to: Q73869 from: 1 to: 585

121 GYHISAlaAspleuGlyLysGln 128
|||||
373 GGTGATGAGATCTTGCAACACAG 396

seq_name: N_Geneseq_34:Q73894

seq_documentation_block:

ID Q73894 standard; DNA: 571 bp

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DR 25-MAY-1995 (first entry)
DE Borrelia JSB antigen vaccine.
KM OspC antigen: vaccine; Lyme disease; borreliosis; immunogen;
KM serovar typing: restriction fragment length polymorphism;
KM RFLP; Pichia pastoris: ss.
OS Borrelia burgdorferi JSB.
PN MO9425596-A.
PD 10-NOV-1994.
PF 29-APR-1994: E01365.
PR 29-APR-1993: US-053863.
PI (IMMO) IMMO AC.
PI Crowe B, Dorner F, Livey I;
PI MPI: 94-358273/44.
DR P-PSDB: R62782.
PT Immunogenic composition comprising OspC antigens - for the
PT treatment of Lyme borreliosis in different, specific geographical
PT areas.
PS Disclosure; Fig. 8; 115pp; English.
CC A vaccine for Lyme disease includes selected OspC antigen
CC formulations based on defined OspC families resolved by serovar
CC typing and RFLP typing. Partial sequences of OspC genes selected
CC from different RFLP types are given in: Q73883-905 (encoded peptides,
CC comprising the first 92% of mature OspC, are given in R62771-93).
CC Complete sequences of these novel ospC genes, including the 3' end,
CC plus sequences for the ospC genes of Borrelia strains H13 and 28691
CC are given in Q73857-82, and encoded proteins in R60884-909. The
CC DNA sequences may be expressed in e.g. Pichia pastoris for
CC recombinant antigen production.
CC Sequence 531 BP; 208 A; 76 C; 100 G; 147 T;
SQ

alignment_scores:
Quality: 8.00 Length: 8
Ratio: 1.000 Gaps: 0
Percent Similarity: 100.000 Percent Identity: 100.000

alignment_block:
US-08-487-032A-764 x Q73894 ..
Align seg 1/1 to: Q73894 from: 1 to: 531

121 GlyHISAlaAspLeuGlyLysGln 128
|||||
370 GCTCATGCAGATCTGCCAACAG 393

seq_name: N_Geneseq_34::T17844

seq_documentation_block:
ID T17844 standard; DNA; 1688 BP.
AC T17844;
DE 24-MAY-1996 (first entry)
PD Soybean palmitoyl-ACP-thioesterase gene clone pTE11.
KM Soybean: palmitoyl-ACP-thioesterase; fatty acid; lipid;
KM vegetable oil; palmitic acid; stearic acid; triacylglycerol;
KM transgenic plant; ss.
OS Glycine max.
FH Key Location/Qualifiers
FT translt_peptide 488..505
FT /*tag= a
FT mat_peptide 506..1477
FT /*tag= b.
FT primer_bind complement (1..16)
FT /*tag= c
FT /*note= "primer SOTTE3"
FT 1640..1657
FT /*tag= d
FT /*note= "primer SOTTE4"
FT primer_bind
FT MO9606936-A1.
PN 07-MAR-1996.
PD 25-AUG-1995: U10627.
PR 31-AUG-1994: US-299044.
PA (DUPO) DU PONT DE NEMOURS & CO E. I.
PI Hitz WD;

DR MPI: 96-160367/16.
PT Canola and soybean palmitoyl-ACP-thioesterase genes - useful in
PT regulation of fatty acid content of the oils of canola and soybean
PT plants
PS Claim 2, page 69-70; 103pp; English.
CC A cDNA clone (T17845), designated pTE11, codes for soybean
CC palmitoyl-ACP-thioesterase. It was obt. from a glycine max
CC embryo cDNA library by screening with a probe based on an Arabidopsis
CC thioesterase-like fragment. A restriction fragment of pTE11 was
CC expressed in Escherichia coli BL21(DE3)(pLysE) cells. The construct
CC encoded a 328-amino acid protein (R82789). Chimeric genes including
CC the isolated sequence can be used to create transgenic plants having
CC altered levels of saturated fatty acids. Vegetable oils (esp.
CC soybean or rapeseed) may be produced that contain lower or higher
CC than normal levels of stearic acid and palmitic acid.
SQ Sequence 1688 BP; 459 A; 349 C; 395 G; 485 T;

alignment_scores:
Quality: 8.00 Length: 8
Ratio: 1.000 Gaps: 0
Percent Similarity: 100.000 Percent Identity: 100.000

alignment_block:
US-08-487-032A-764 x T17844/rev ..
Align seg 1/1 to reverse of: T17844 from: 1 to: 1688

14 SerAlaValLeuSerSerSerLeu 21
|||||
1119 TCCTGCTGTGTCTCTCTCAAGTTTA 1096

seq_name: N_Geneseq_34:Q90716

seq_documentation_block:
ID Q90716 standard; DNA; 639 BP.
AC Q90716;
DE 31-JUL-1996 (first entry)
PD B. burgdorferi strain PKO outer surface protein C (OspC-PKO) DNA.
KM Strain PKO: outer surface protein; OspC; antigenic domain;
KM Chimeric protein; treatment; diagnosis; infection; vaccine;
KM Lyme borreliosis; immunodiagnostic assay; antibody;
KM T-cell reactivity; chimeric; ds.
OS Borrelia burgdorferi.
FH Key Location/Qualifiers
FT cds 1..639
FT /*tag= a
FT MO9512676-A1.
PN 11-MAY-1995.
PD 27-OCT-1994: U12352.
PR 01-NOV-1993: US-148191.
PR 29-APR-1994: US-235836.
PA (ASU-) ASSOC UNIVERSITIES INC.
PI Dunn JJ, Luft BJ;
PI MPI: 95-215034/28.
DR P-PSDB: R75729.
PT Chimeric protein comprising 2 or more antigenic Borrelia
PT polypeptide(s) - useful in a vaccine against Lyme borreliosis and in
PT immuno:diagnostic assays
PS Example 1; Fig 14; 200pp; English.
CC The present sequence encodes the B. burgdorferi strain PKO, outer
CC surface protein C (OspC-PKO). Using chemical or enzymatic methods,
CC peptide fragments of OspC-PKO were prepd., and analysed by western
CC blot to assess their ability to bind different anti-OspC monoclonal
CC antibodies. The information obt. was used to locate antigenic
CC domains in OspC-PKO, the epitopes of which were mapped with the
CC aid of site directed mutagenesis. Identical analyses were performed
CC on a selection of Osp purified from a variety of B. burgdorferi
CC strains; the results from which were utilised in the prepn. of a
CC pool of antigenic Borrelia polypeptides, and corresponding
CC polynucleotides. Chimeric proteins comprising 2 or more antigenic
CC Borrelia polypeptides, that do not naturally occur in the same
CC protein, can be used in the treatment and diagnosis of Borrelia

US-08-487-032A-764 x V65261/rev ..

Align seg 1/1 to reverse of: V65261 from: 1 to: 2766

163 PheTTPtPGIyArgTyArgArg 170
 ||||||||||||||||||
 2703 TTCGTGTGGGAGATATCGCAGA 2680

seq_name: N_Geneseq_34:N91093

seq_documentation_block:

ID N91093 standard; DNA: 1950 BP.

AC N91093;

DT 04-JUL-1990 (first entry)

DE Protein G gene.

KW Protein G; immunoglobulin; Fc receptor; ds.

OS Streptococcus sp.

Key Location/Qualifiers

FT -35_signal 465..470

FT /*tag= c

FT -10_signal 487..492

FT /*tag= b

FT rbs 565..571

FT /*tag= d

FT cds 578..1918

FT /*tag= a

PN MO8810306-A.

PD 29-DEC-1988.

PF 20-JUN-1988; 02084.

PR 19-JUN-1987; US-063959.

PA (GENE-) Genex Corp.

PI Fahnestock SR.

DR WPI: 89-023848/03.

DR P-PSDB: P95030.

PT Cloned protein G variant genes

PT expressing proteins having immunoglobulin-binding properties of

PT protein G and derived from Streptococcus sp.

PS Disclosure: pp: English.

CC Gene encodes protein G of non-pathogenic streptococcus sp. allowing

CC eg isolation of the protein and variants, useful as bacterial Fc receptors

CC eg in purification and detection of Abs., screening of hybridoma clones

CC and treatment of disease.

SQ Sequence 1950 BP; 705 A; 323 C; 398 G; 524 T;

alignment_scores:

Quality: 7.00

Ratio: 1.000

Percent Similarity: 100.000

Percent Identity: 100.000

Gaps: 0

Length: 7

alignment_block:

US-08-487-032A-764 x N91093/rev ..

Align seg 1/1 to reverse of: N91093 from: 1 to: 1950

17 LeuSerSerSerLeuLeuAla 23

|||||

1152 TTGCAAGTTCTCTGTAGCT 1132